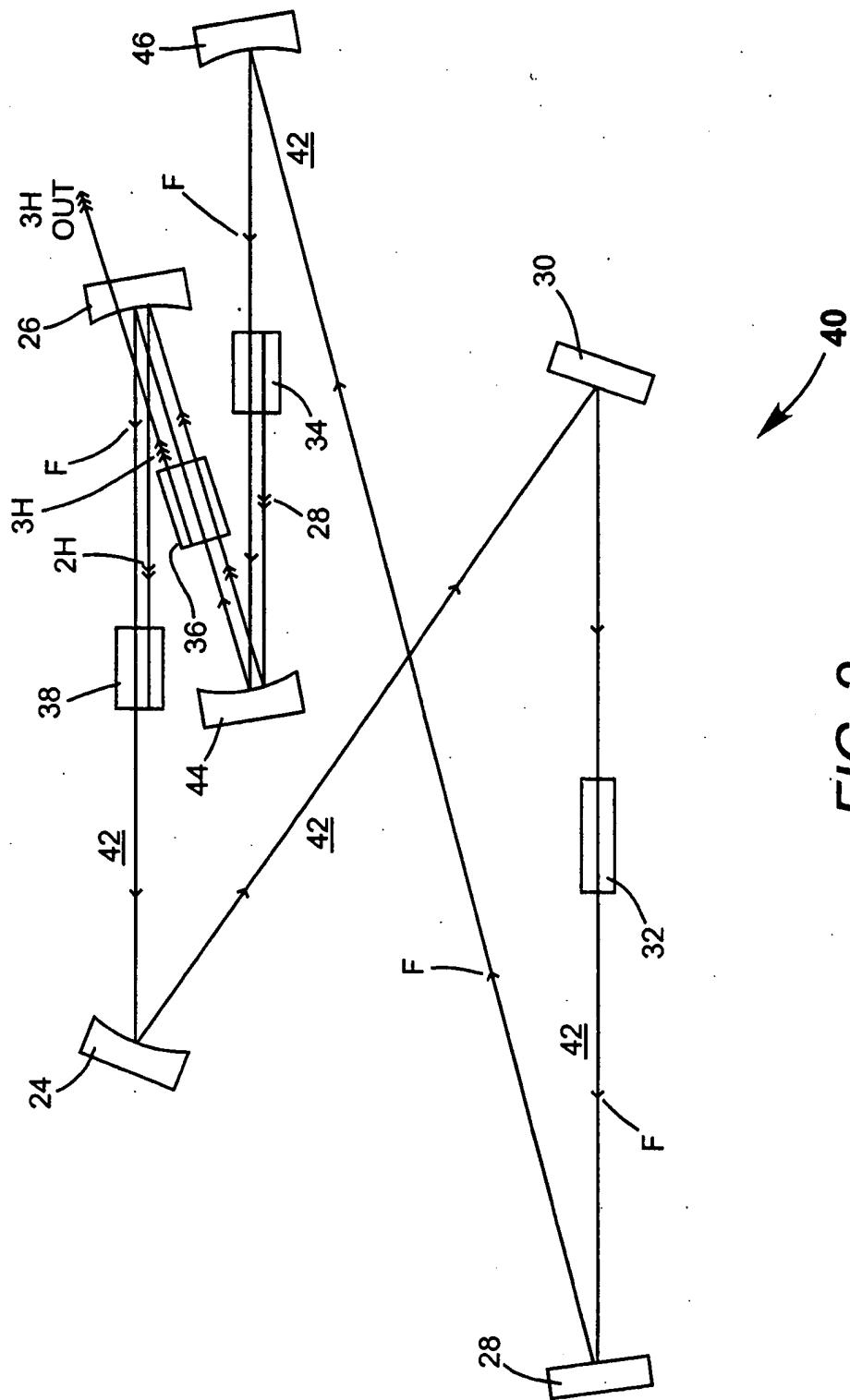


FIG. 1



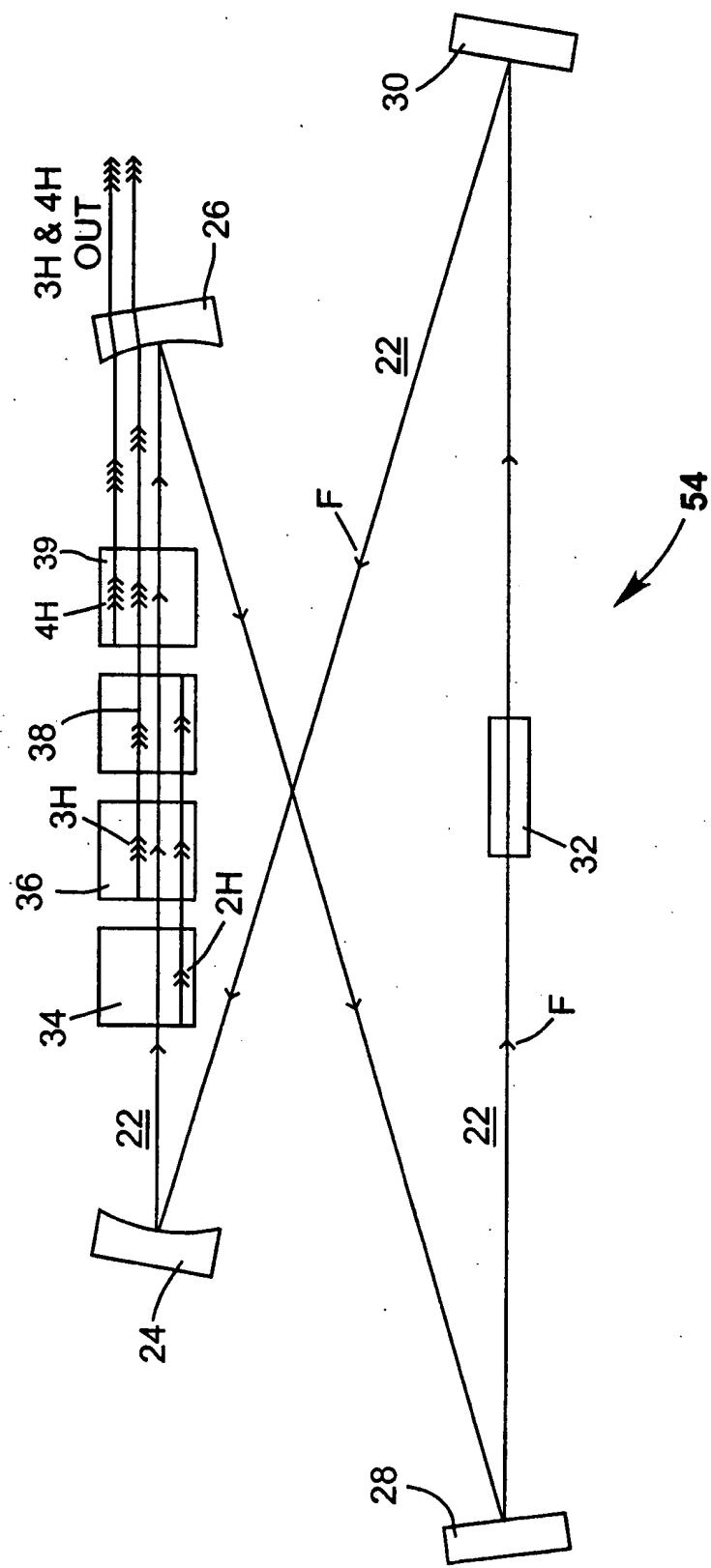


FIG. 3

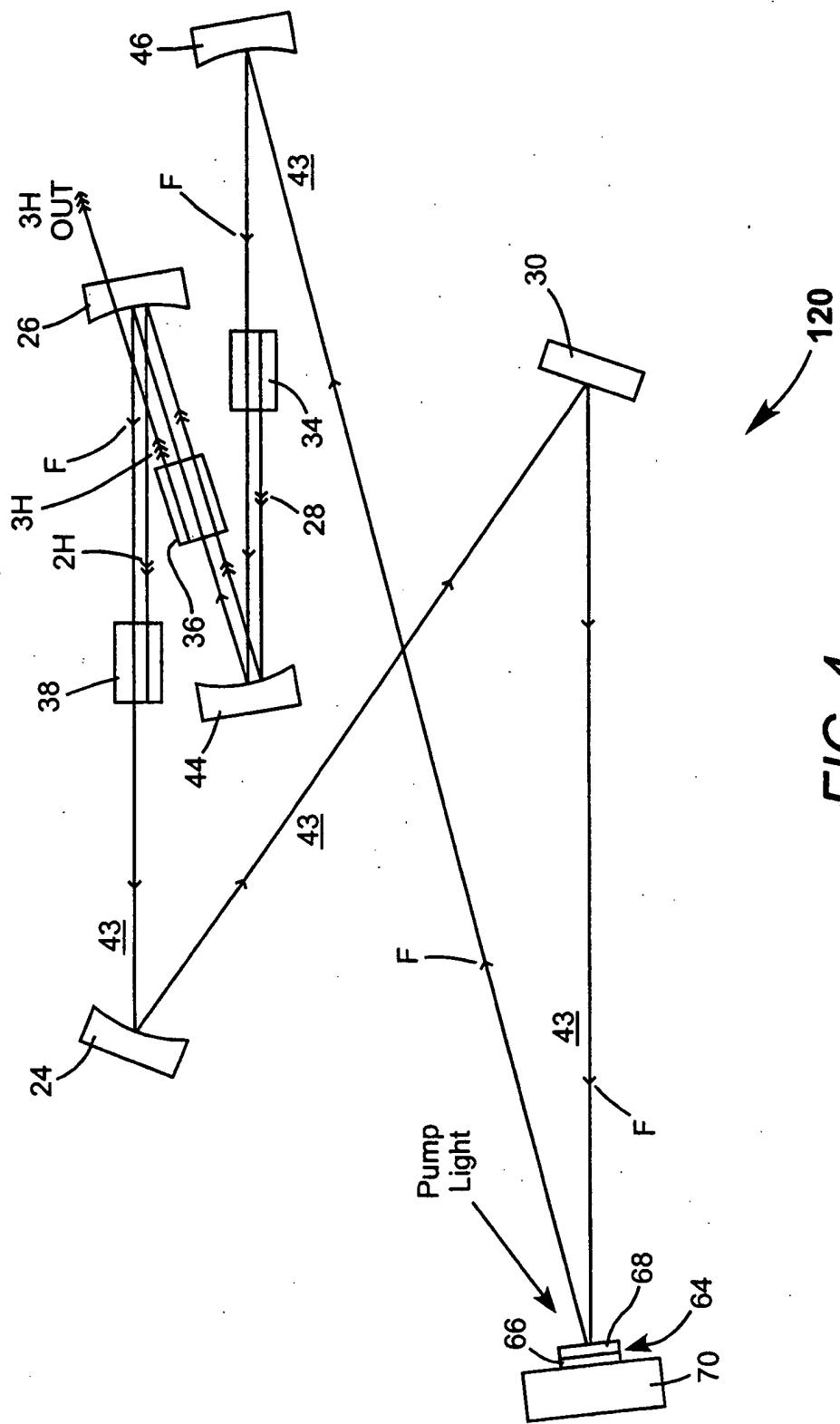
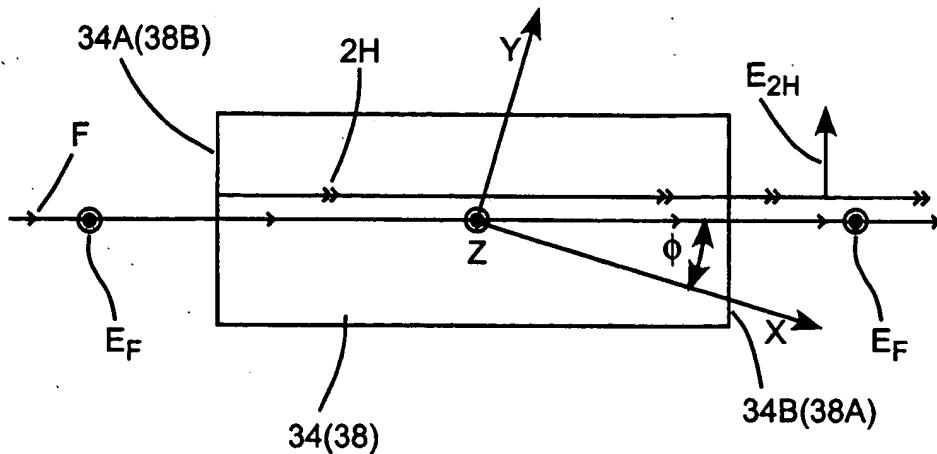


FIG. 4



**FIG. 5**

Gain Medium	Wave-length (nm)	Crystal Temp. (°C)	Cut Angle φ	Cut Angle θ	Spot Size (μm)	Length (mm)	Doubling Efficiency α (W <sup>-1</sup> )
Nd:YVO <sub>4</sub>	1064	50	10.1	90.0	40	20	1.25 10 <sup>-4</sup>
Nd:YVO <sub>4</sub>	1064	143	0.0	90.0	40	20	2.54 10 <sup>-4</sup>
OPS	976	50	16.5	90.0	40	20	0.96 10 <sup>-4</sup>
OPS	976	298	0.0	90.0	40	20	3.00 10 <sup>-4</sup>

**FIG. 6**

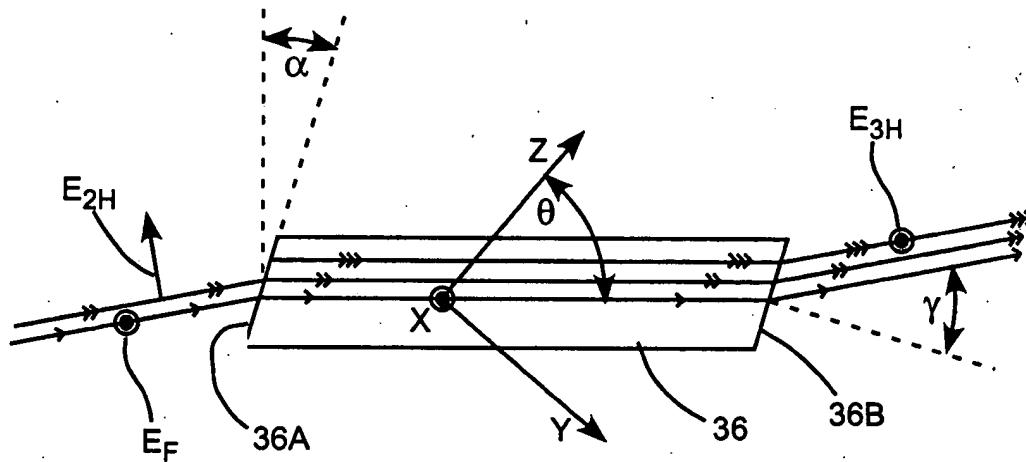


FIG. 7

Gain Medium	Wave-length (nm)	Inc. Angle $\gamma$	Wedge Angle $\alpha$	Cut Angle $\phi$	Cut Angle $\theta$	Spot Size ( $\mu\text{m}$ )	Length (mm)	Tripling Efficiency $\alpha (\text{W}^{-1})$
Nd:YVO <sub>4</sub>	1064	27.7	17.3	90.0	43.0	40	20	$3.79 \cdot 10^{-4}$
OPS	976	16.9	10.7	90.0	67.7	40	20	$1.79 \cdot 10^{-4}$

FIG. 8

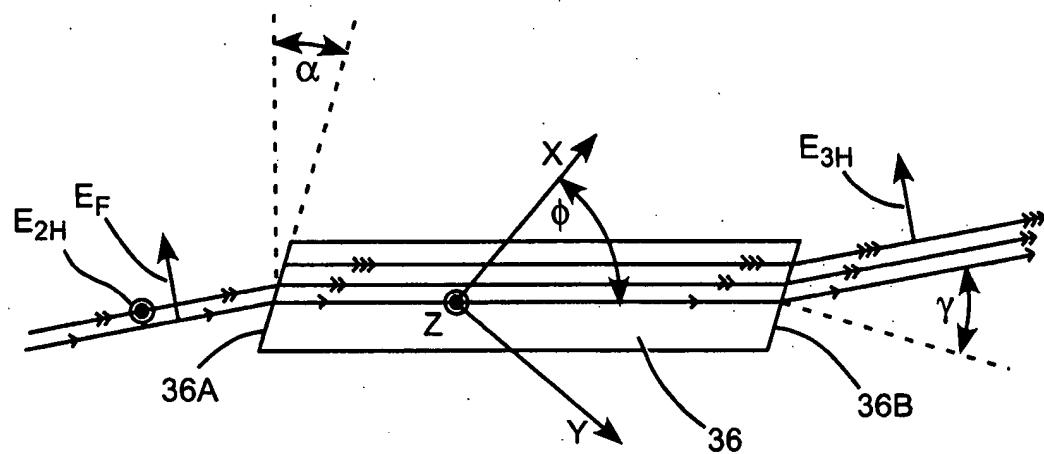


FIG. 9

Gain Medium	Wave-length (nm)	Inc. Angle $\gamma$	Wedge Angle $\alpha$	Cut Angle $\phi$	Cut Angle $\theta$	Spot Size ( $\mu\text{m}$ )	Length (mm)	Tripling Efficiency $\alpha (\text{W}^{-1})$
Nd:YVO <sub>4</sub>	1064	30.7	18.7	40.5	90.0	40	20	$11.3 \cdot 10^{-4}$
OPS	976	24.6	15.1	58.0	90.0	40	20	$12.6 \cdot 10^{-4}$

FIG. 10

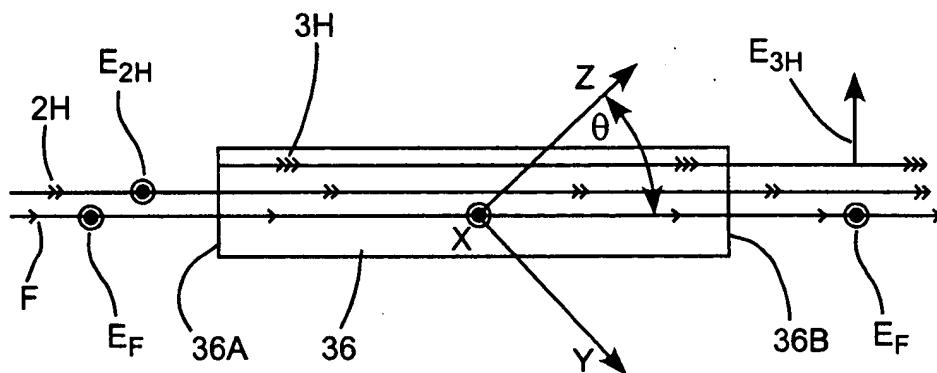
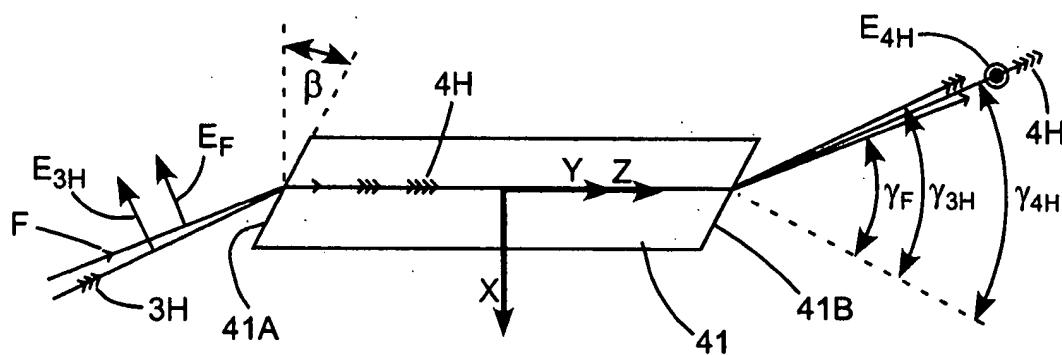


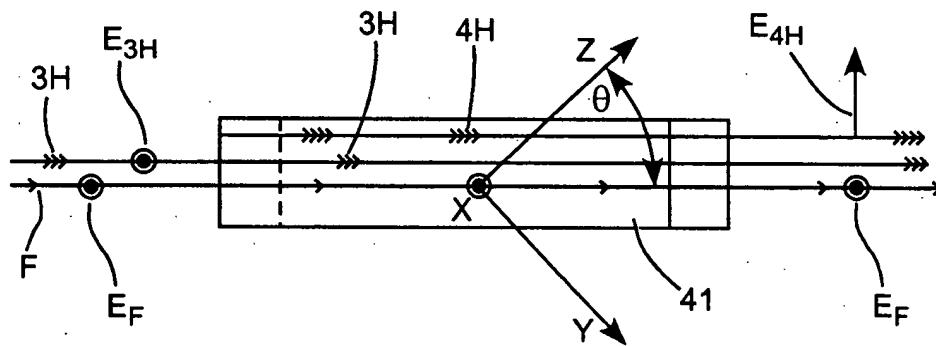
FIG. 11

Gain Medium	Wave-length (nm)	Cut Angle $\phi$	Cut Angle $\theta$	Spot Size ( $\mu\text{m}$ )	Length (mm)	Tripling Efficiency $\alpha (\text{W}^{-1})$
Nd:YVO <sub>4</sub>	1064	90.0	180.0 - 31.3 $= 148.7$	40	20	$5.94 \cdot 10^{-4}$
OPS	976	90.0	180.0 - 34.4 $= 145.6$	40	20	$6.41 \cdot 10^{-4}$

FIG. 12



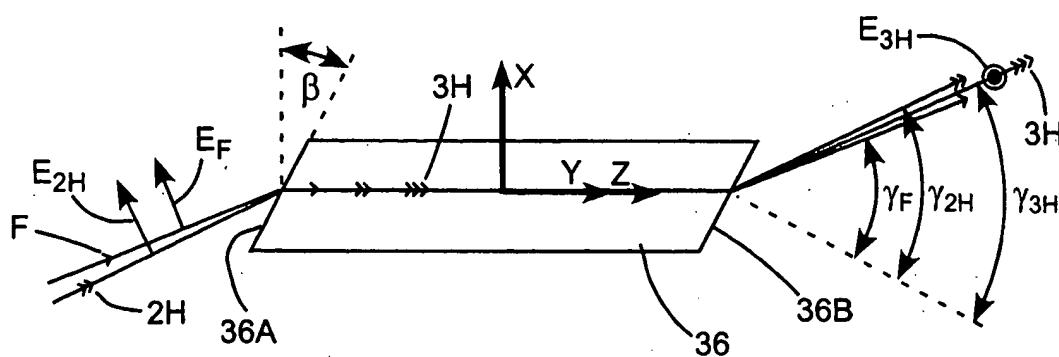
*FIG. 13A*



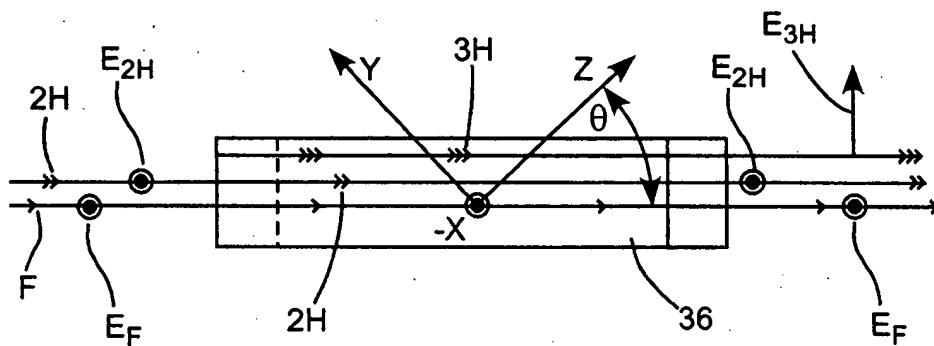
*FIG. 13B*

Gain Medium	Wave-length (nm)	Inc. Angle $\gamma_F$	Inc. Angle $\gamma_{3H}$	Inc. Angle $\gamma_{4H}$	Wedge Angle $\beta$	Cut Angle $\phi$	Cut Angle $\theta$	Spot Size ( $\mu\text{m}$ )	Length (mm)	Quadrupling Efficiency $\alpha (\text{W}^{-1})$
Nd:YVO <sub>4</sub>	1064	58.85	61.91	61.12	31.15	90.0	180 - 40.30 = 139.70	40	20	$2.97 \cdot 10^{-4}$
OPS	976	58.87	62.58	61.61	31.12	90.0	180 - 45.43 = 134.57	40	20	$2.80 \cdot 10^{-4}$

*FIG. 14*



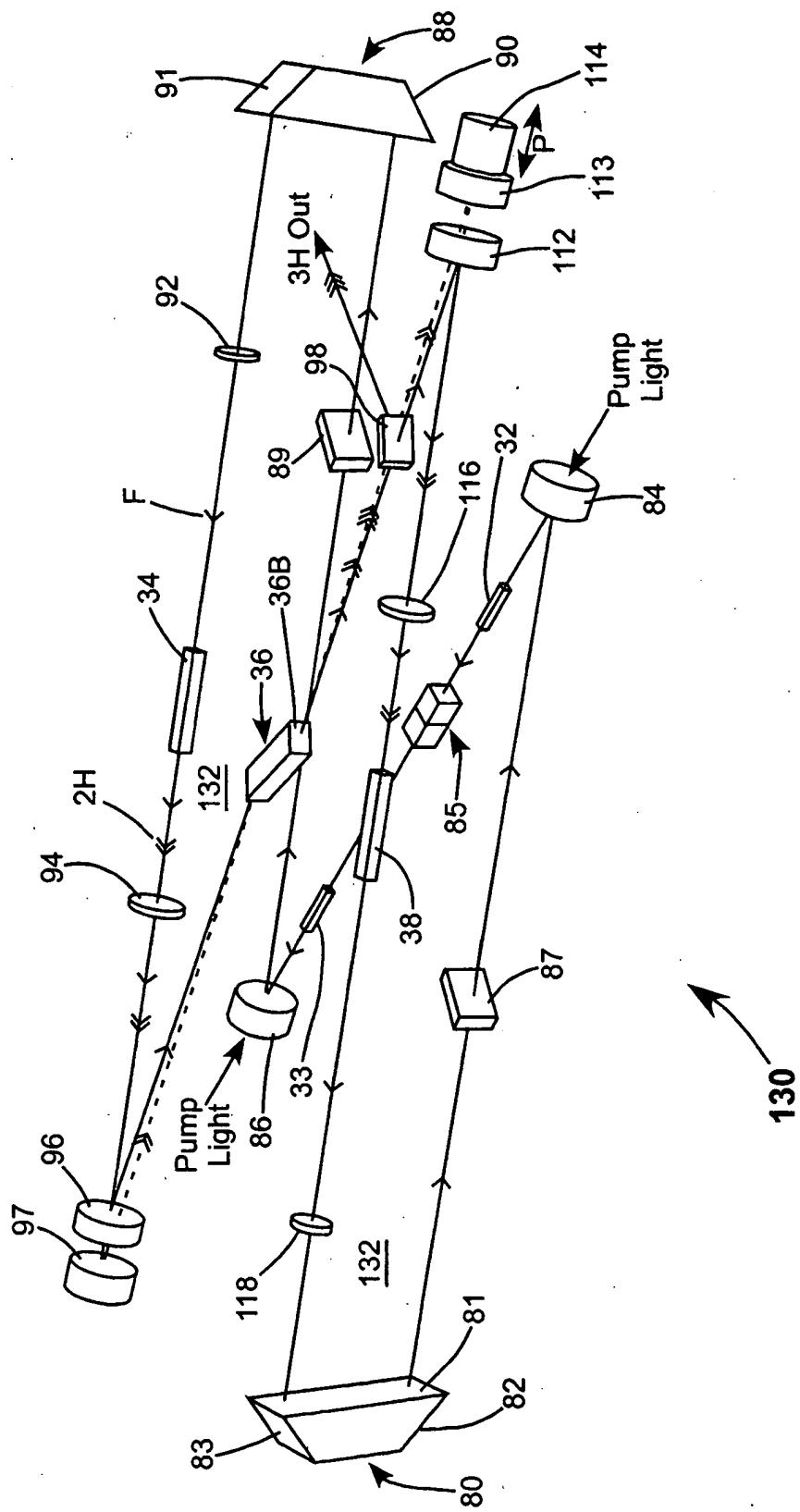
**FIG. 15A**



**FIG. 15B**

Gain Medium	Wave-length (nm)	Inc. Angle $\gamma_F$	Inc. Angle $\gamma_{3H}$	Inc. Angle $\gamma_{4H}$	Wedge Angle $\beta$	Cut Angle $\phi$	Cut Angle $\theta$	Spot Size ( $\mu\text{m}$ )	Length (mm)	Tripling Efficiency $\alpha (\text{W}^{-1})$
Nd:YVO <sub>4</sub>	1064	58.8	60.0	59.6	31.20	-90.0	180 - 31.3 $= 148.7$	40	20	$2.80 \cdot 10^{-4}$

**FIG. 16**



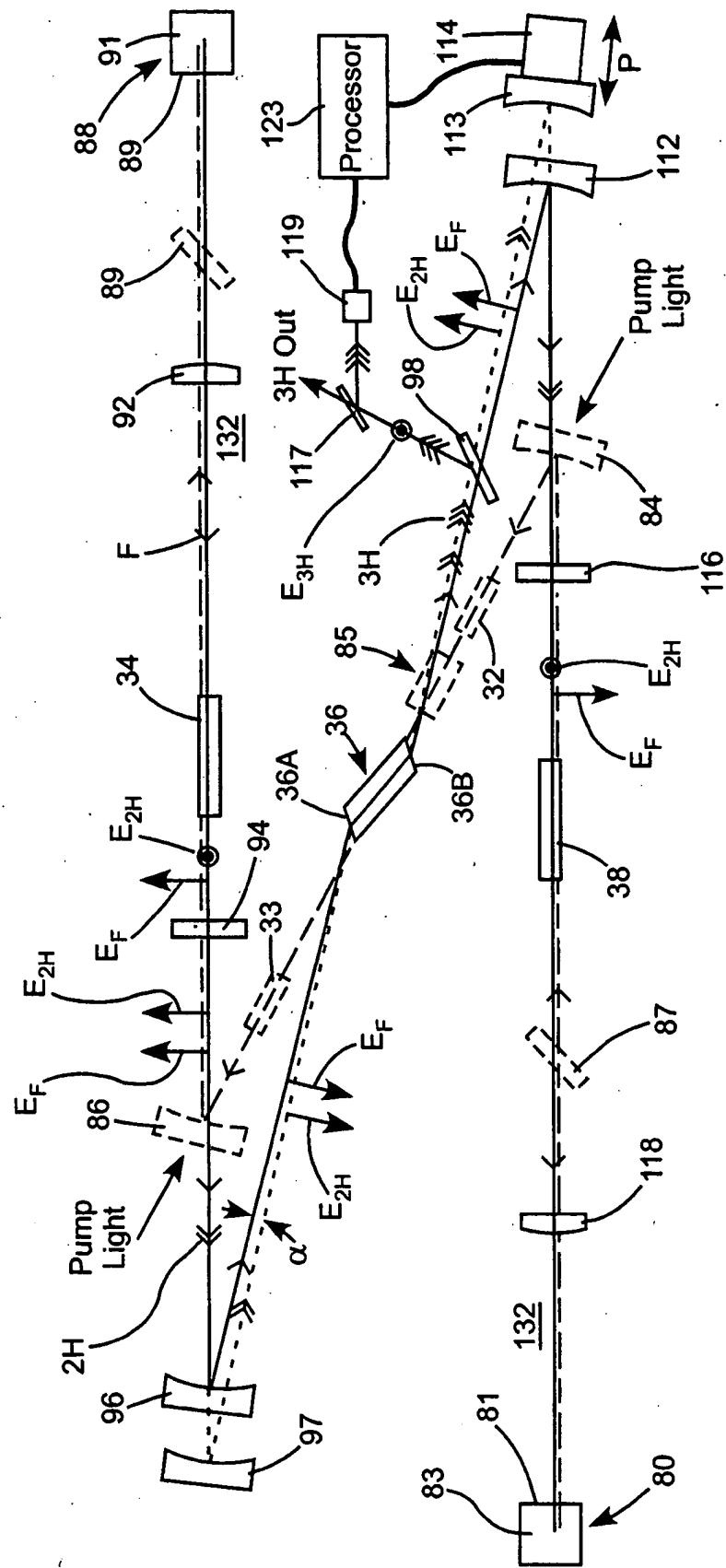


FIG. 18

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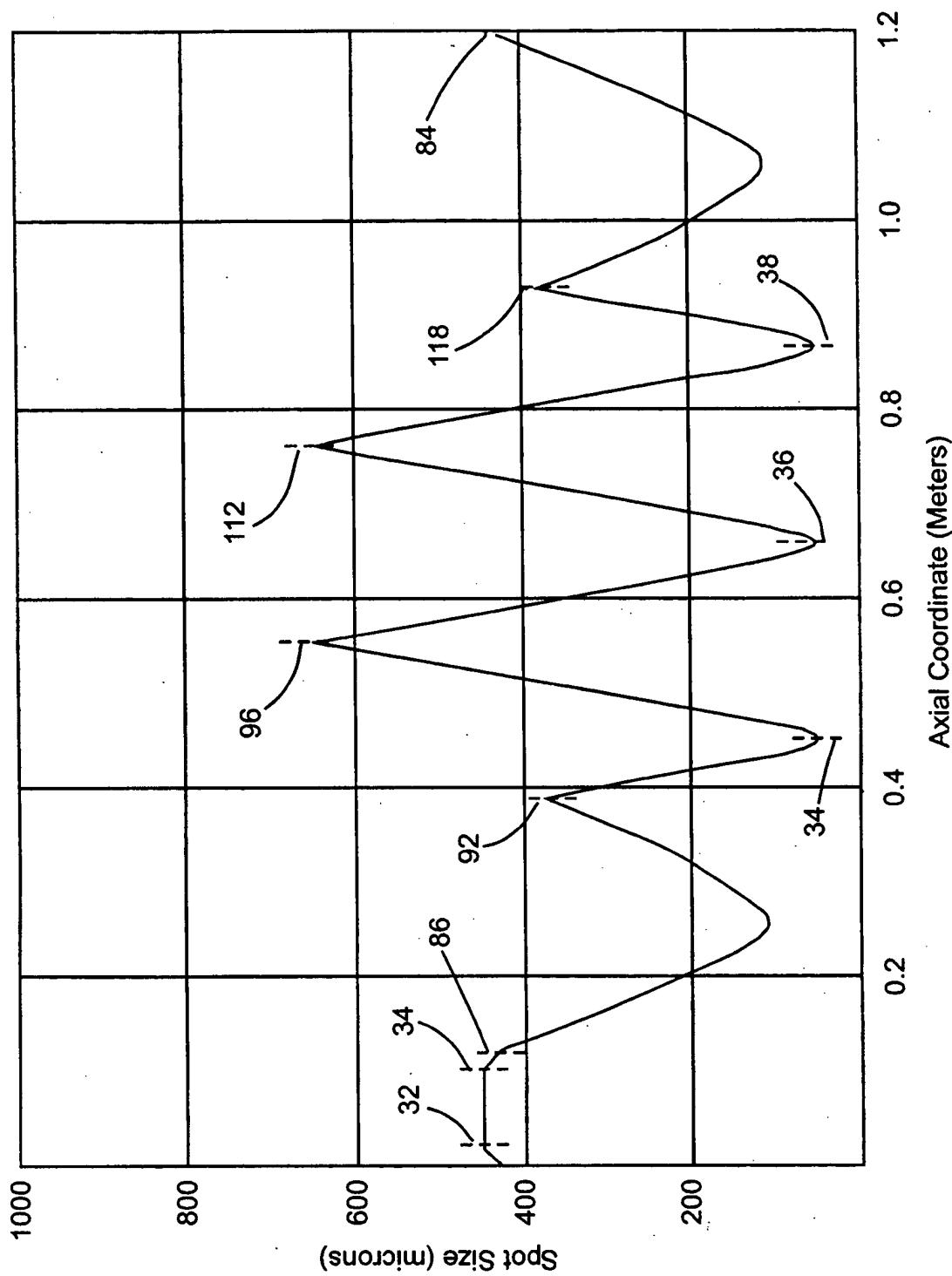
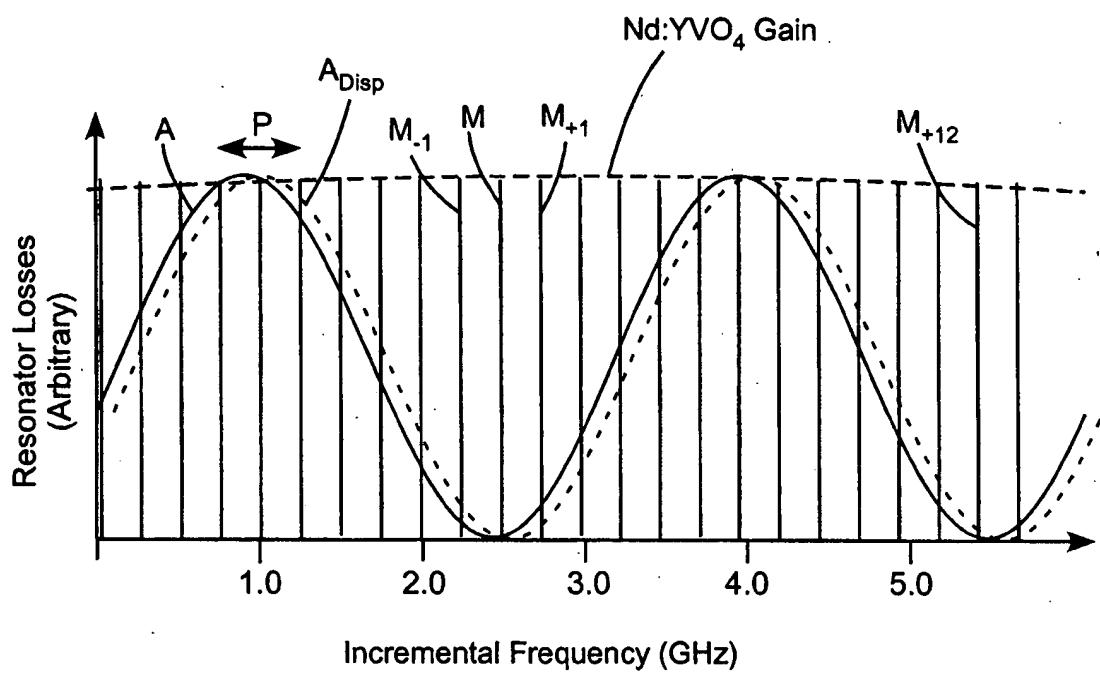


FIG. 19



**FIG. 20**

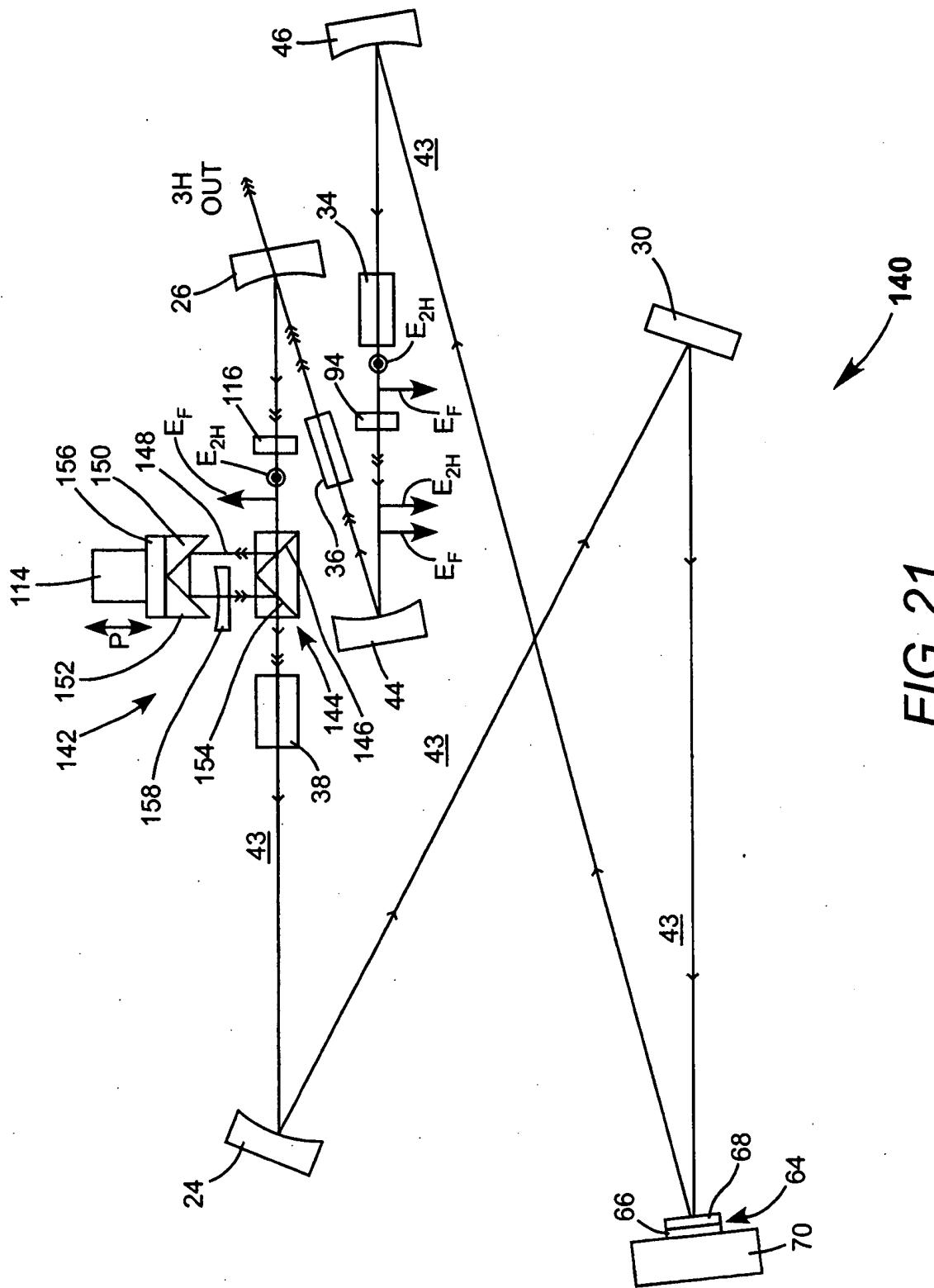


FIG. 21

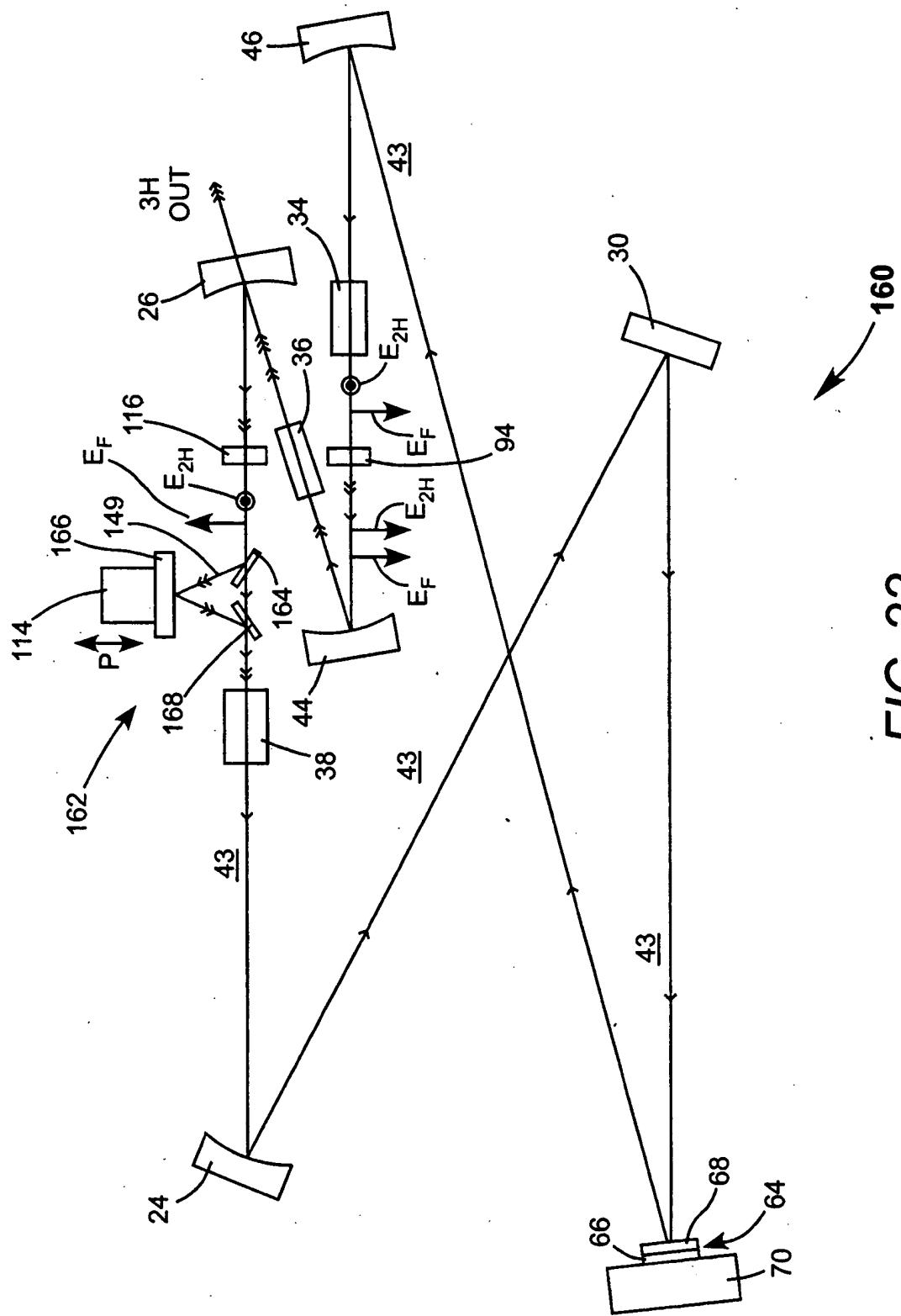


FIG. 22

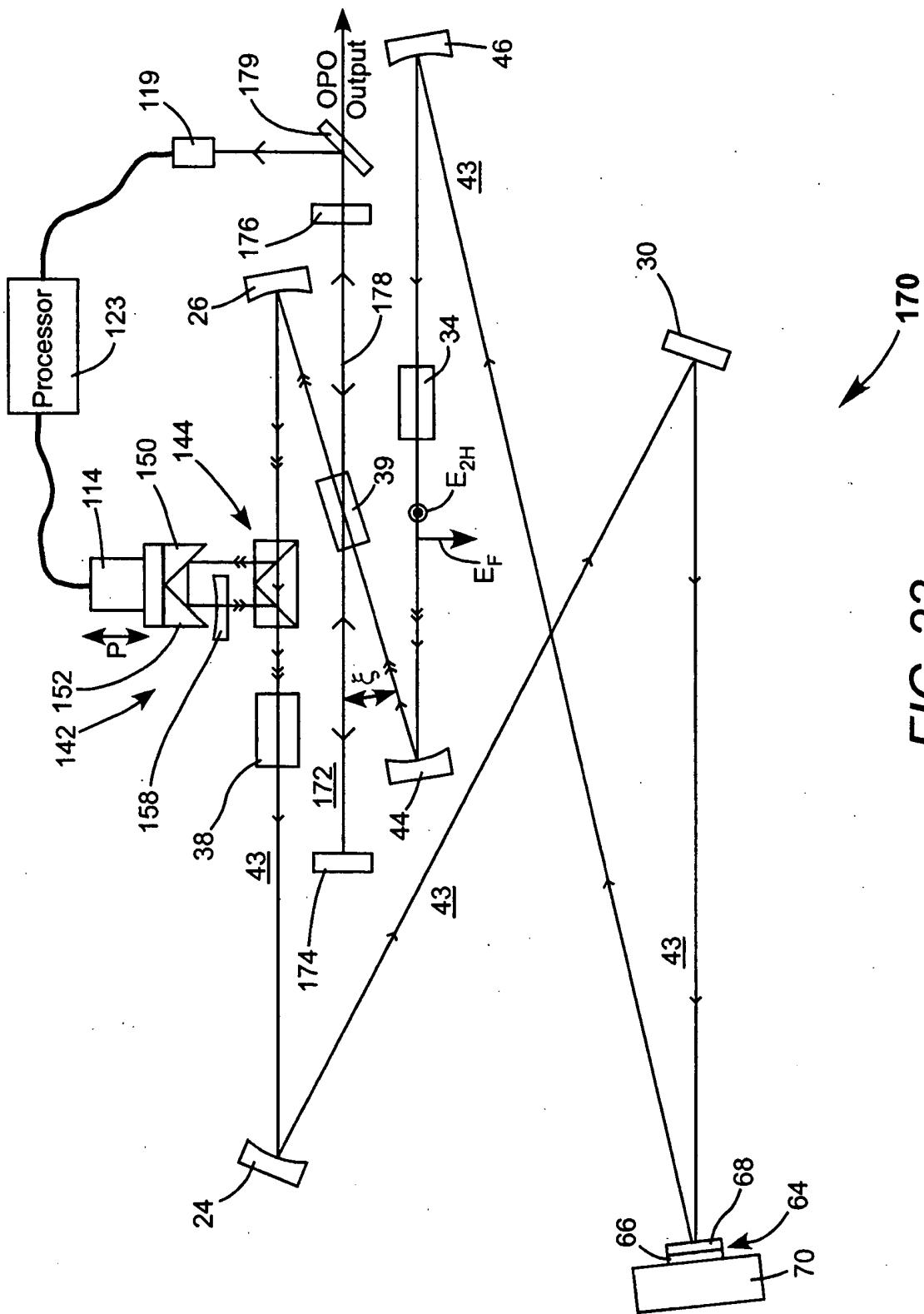


FIG. 23

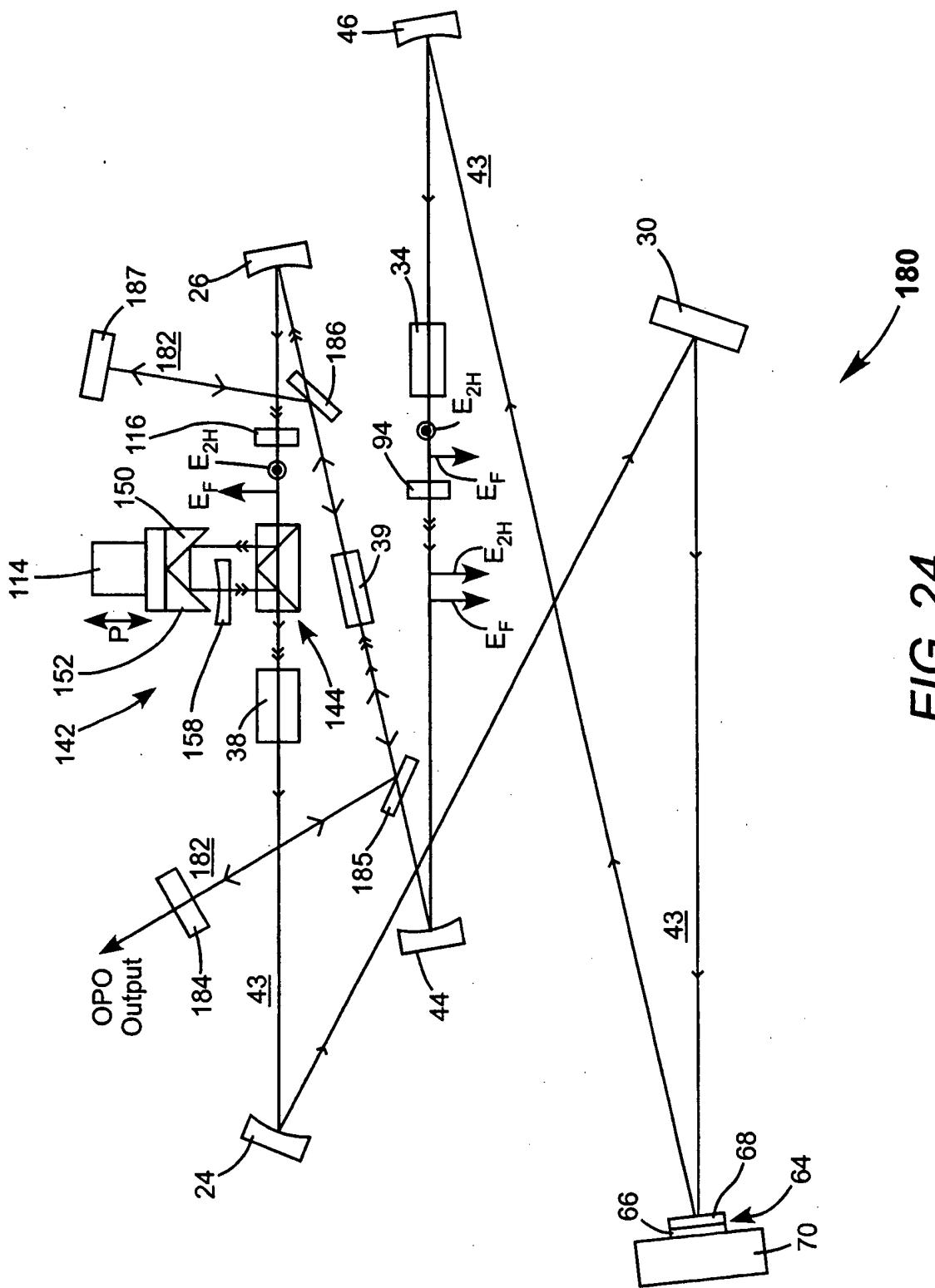


FIG. 24

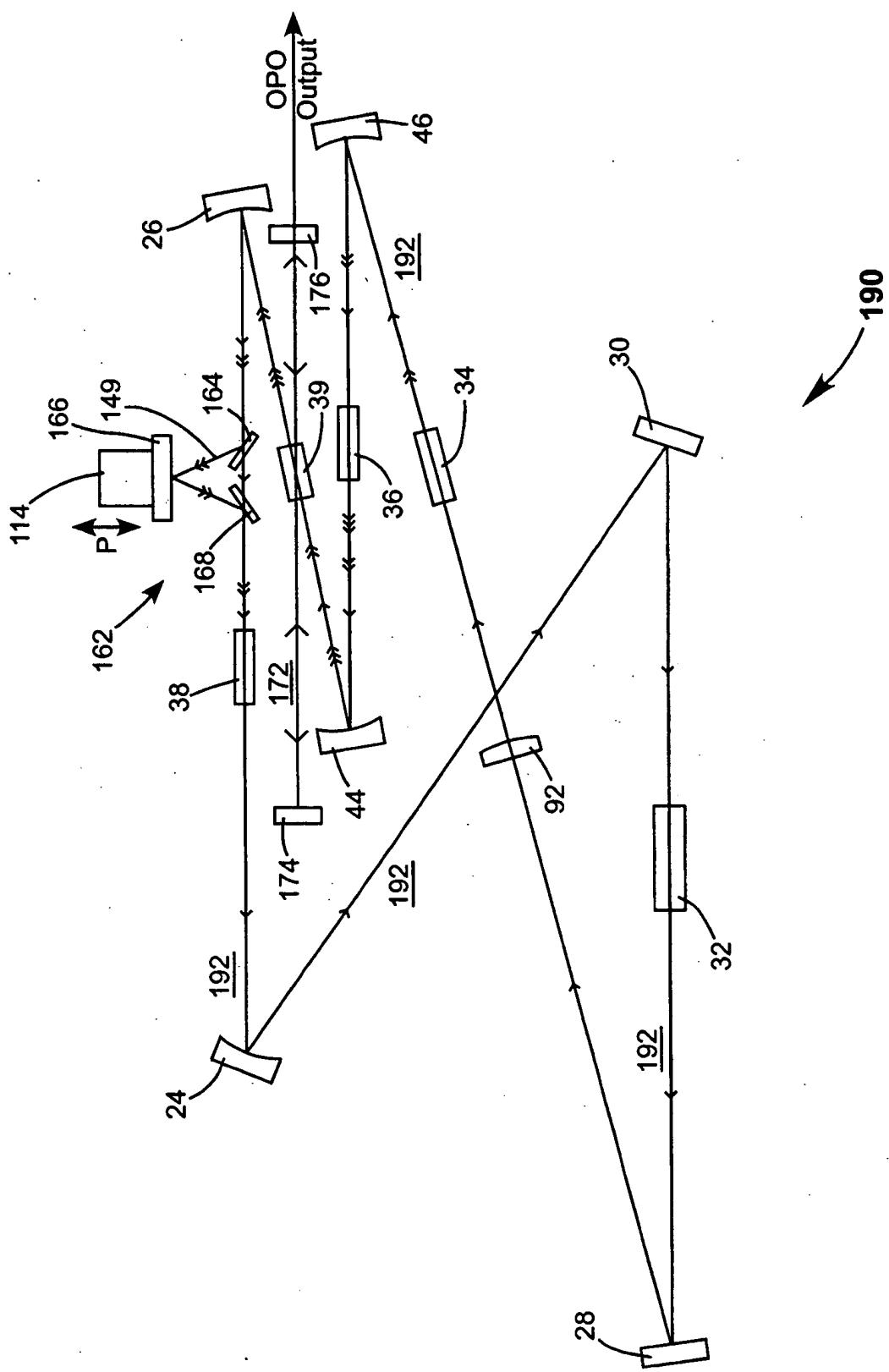


FIG. 25